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EDITORIAL NOTES

Somebody should write a *Primer of Evolution* for the especial use of school-teachers. Everybody says nowadays that he bases his work with the children upon the principles of evolution, but practice soon betrays that very few clearly or fully appreciate how much is implied in their adoption. Our educational practice rests mainly upon a curious and a confusing blend of evolutionary theory with ancient tradition. Bound up in the same teacher's mind we can often find the most audacious guesses concerning the possibilities of growth and a whole code of superstitious rites as a proposed means of realizing them—hence the imperative need of a Primer.

The first lesson of this Primer should impress the point that the present never represents anything but a group of conditions that is undergoing reorganization; conditions that are resolving themselves constantly into new relationships. Most teachers have gone no farther than dimly to realize that “the present is a transition stage”—meaning by this that it represents a set of conditions in flux *which connect one fixed state with another fixed state that is soon to follow*. But this is not evolution at all; it is a nugatory blend of two diametrically opposed ideas, and the product is practically worthless as a foundation principle for school-teaching. Under this false idea, the teacher is continually trying to bring a living, moving, growing, thing, the child, into a state of rest. Without fully realizing it, he has his ideals fixed on the stage of quiet which it is supposed will succeed the period of transition. Present unrest is only to be endured for the sake of the repose that is to come. The teacher deals with it as a temporary shifting thing preliminary to future stable realities. He recognizes the importance of present movement to the *growing* thing, but, after all, his interest is centered *in the thing grown up*; whereas, it is the fact

that a fully grown-up stage is never reached. Evolution never predicts that for even our descendants. Here is a blend of the modern ideas of evolution with the ancient heathen notion of a state of endless quietude. This is at the root of most of the spiritual conflicts between pupil and teacher. Let the Primer make this matter clear.

The second lesson of the Primer should bring out sharply the fact that evolution involves elimination and extinction as well as conservation and propagation; that it involves

Chapter II degeneration as well as progress. It is the most serious part of the teacher's business to determine the direction and the value of a tendency. This was not always so. In the past

The Importance of Tendencies all human tendencies were bunched together and assumed to be bad. In those days the science of teaching was an organized and wholesale warfare

against nature. After the complete subjugation of nature, education was, then, something to be supplied. Under such ideals teaching was a matter of "main strength." Under the newer ideals the value of education will be determined largely, so far as the teacher is concerned, by his power of discrimination; that is, upon his ability to decide which tendencies are fading and atavistic, and which are growing and prophetic; which should be ignored and discountenanced, and which should be recognized and cultivated. A study of tendencies is the critical thing in education. As child-study and psychology have shown, they have their natural periods of appearance and disappearance. If the teacher misjudges and cultivates the wrong one, or neglects the right one at the proper period, irreparable mischief is done. Most teachers, blindly applying the "Recapitulation Theory," make too much of many selfish tendencies in childhood that are as rudimentary, socially, as the vermiform appendix is physiologically. It is no part of education to encourage growth in one more than in the other. Such tendencies must be reckoned with, but it is ridiculous to treat them as a help instead of as a hindrance in human development.

Illustrations are numerous; for example, take the question of

ambidexterity. Is the gradual shifting of function to one hand, usually the right, a sign of progress or of degeneration? How should the teacher deal with this tendency of the pupil to localize functions in one of two similarly constructed organs or members? That is, is the evident tendency of man to change from a bilaterally symmetrical animal to one that is unilateral, a tendency in the line of progress or of deterioration? Until we can settle this question, our teaching must be at random. The tendency to localize physical functions seems to be almost irresistible. In teaching how to ride the bicycle, most instructors were careful to train their pupils to dismount on either side. Yet, once "out of school," not one rider in a hundred, perhaps, continued to dismount indifferently on the two sides—one or the other being permanently chosen. In mounting a horse, one always does so from the left side—though, but for the tendency toward unilateralism, there is no reason why either side should have the preference. There are many skilful horsemen who would even find it almost, if not quite, impossible to mount from the "off side." The milking of a cow from the right side is another concession in the same direction. This has gone so far as to create a kind of corresponding habit in the bilateral cow herself, as there are few of them, indeed, that will not kick—literally kick—if the milker in absent-mindedness tries to perform the operation from the "wrong side."

Now here is a biological tendency—what is its meaning? Is it backward or forward? On the one side, the gist of the argument is that, if we can do well with one hand, we should be twice as well off if the other hand were equally proficient—which may be a statement of fact, but it is certainly not proof. On the other side, it is claimed that the localization of function in one place rather than in two results in a refinement of work that would not otherwise be possible. This, also, is an assertion, but not proof. In the meantime our teaching will be guesswork—each according to his own guess.

The study of tendencies is not less interesting in other than

strictly biological fields. At present we are trying to conduct the school according to the ideals required by the theory of social development. But there is in every school a tendency—now much in favor, too—that is diametrically opposed to those ideals. This is the tendency toward so-called specialization in studies and in teaching. The specialist—the type most commonly met—is one who turns his back upon the social theory. He sets himself off as one apart, hyena-like, to enjoy his bone alone. We cannot imagine a “social” body composed of different specialists. They could only form an aggregation. If one were to lock up in the same room, for example, a specialist in some department of chemistry with a specialist in some department of language, there would be but little chance for social organization, unless both were to forsake their specialties. By mutual consent—thus implying a social instinct—they would have to unite upon some common topic—say, the weather. But then they would be specialists no longer! They would be compelled to discuss a topic that neither knew much about, or else be doomed to a gloomy solitude. Here is a tendency, the value of which, as a means of education, should be carefully determined. In the social field there have been some examples which will throw light upon the subject. While in the biological world no strictly unilateral or bilateral prodigy has been produced, in the social domain it is different. Here nature is not always uncertain or atavistic. At times in chance creations of mind she is clearly prophetic.

A generation or two ago the world was interested in the musical wonder known as “Blind Tom.” In the direction of music Blind Tom seemed to have reached the limit of development. Into him, nature appeared to crowd the result of a thousand ages of musical education. Thru him, we were permitted to look into the distant future and catch a glimpse of what specialization in music may do. But Blind Tom was the extreme limit also of the anti-social type. He was absolutely senseless toward every social influence. From the social standpoint in him, degeneracy had reached the bottom; from that of the specialist he represented the climax—that pitch of perfection

where all that we now call learning, knowledge and wisdom, in music, had become practically an unconscious instinct. For him, in the field of music, there was no more learning—no more knowledge.

We have examples of the opposite kind, too. Take Leonardo da Vinci; a mechanic, an engineer, an inventor, an artist, and a scientist; a scientist, in the dark ages, asking questions upon which no twentieth-century scientist can improve. He was a man not only great in almost every field of human endeavor; he possessed an open-mindedness that far outran his day—that far outruns our own time. He was in no sense a specialist. Were he to come to life now, it would seem as though he should fall in at once with any and all of our many activities and immediately lead the way into new fields. He stands high as an ideal social type. There is no phase of society where the Da Vinci quality of life is not made welcome and which it does not adorn.

The human being when born is open to a wonderful variety of interests. For a brief period he is left in a measure unfettered, and he acquires skill, knowledge, and a breadth of interest to a marvelous extent. The school then takes hold, and with its dogma that “a few things well learned are better than a little of many things,” it begins the cramping, narrowing process, until in some cases it actually creates in the man a kind of pride in his ignorance concerning most things on the earth. It is as tho he used his vast ignorance of many things to represent obversely the depth and intensity of his knowledge of a few.

Now, if the present does foreshadow the future, and if the social ideal is the thing to be developed, we must draw the line somewhere on the specialist. If we want to develop the social type, we must treat with greater consideration and intelligence that love for breadth of knowledge that is the instinct of every child. The plea of the specialist is that, since one cannot know all or very much about everything, the general quest should be abandoned and he should try to know a great deal about a few things. But in the growth of the social type as a product of evolution, it is not the *amount of knowledge*

**Leonardo
Da Vinci**

**Variety
of Inherited
Interests**

**A False
Scent**

either of many things or of one thing that is important. It is that hospitality toward all things and interest in them which makes social organization possible. Nobody can transmit his knowledge to posterity any more than he can his money. But

Only Quality of Character Transmittible his quality of character, his attitude toward all things, including his fellows, whether it be narrow, self-centered, and solitary, or whether it be liberal, sympathetic, and social—it is this quality of character that seems to go onward through the generations. Herein lies the real significance of the teaching of psychology, that the period of childhood and youth should be prolonged to the latest moment: not merely that the child may be kept in short clothes, may play with dolls, and may be fed with a spoon, but, rather, that the inborn and inherited breadth of interest may have the chance of unhampered growth as long as possible. This is important because

The Child the Social Type *it is in his early years that the human being most clearly foreshadows the real social type of the far-distant future.* As instinctive and untrained children, we are truly social; as educated adults, we degenerate and become merely gregarious.

There is dire need for a reformation of specialists and of specialization. The universities must stop sending into the high school and elementary school their graduates as specialists who have no knowledge of the tendencies that sway childhood and youth, and consequently no appreciation of their tremendous significance. For an obvious reason, the kind of specialization now permitted in the universities leads the majority of teachers so prepared to begin with children just where they themselves left off in their postgraduate work. Such teachers bring into the schoolroom all the formulas of true scientific instruction, but these in their hands are as meaningless and ineffectual with childhood and youth as would be the rites and ceremonies of the sun-worshippers. It is another instance of a confusing blend of modern scientific method with the antiquated theory that early tendencies must be overcome, or, at least, may be ignored.

Here, then, are three chapters for our *Primer of Evolution*.

W. S. J.